

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION

JOE ANDREW SALAZAR,

Plaintiff,

V.

HTC CORPORATION,

Defendant.

Civil Action No.  
2:16-cv-01096-JRG-RSP

## JURY TRIAL DEMANDED

## **DEFENDANT’S RESPONSIVE CLAIM CONSTRUCTION BRIEF**

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## **TABLE OF CONTENTS**

I.	INTRODUCTION .....	1
II.	RELEVANT CLAIM CONSTRUCTION LAW .....	1
III.	THE ‘467 PATENT AND ITS PROSECUTION HISTORY.....	2
A.	The ‘467 Patent .....	2
B.	The Prosecution History is Highly Relevant .....	3
IV.	CONSTRUCTION OF THE TERMS .....	5
A.	The Claim Preamble Agreements .....	5
B.	“Handset” and “Base Station” .....	6
C.	The Microprocessor Limitations.....	7
1.	The Microprocessor Limitations Must Include the Recited Functionality .....	8
2.	These Microprocessor Limitations Fail to Provide the Requisite Notice Under <i>IPXL Holdings</i> .....	10
D.	The “Memory Device” Limitations of Claims 1, 10 and 34.....	13
1.	The “Memory Device” Limitations are Governed by § 112(f).....	13
2.	Construction Without Application of § 112(f).....	16
E.	The “Selector” Limitations .....	17
F.	The “Data Detector” Limitation.....	18
G.	Communications Terms .....	18
1.	“Command Code Set” Term .....	19
2.	“Communications Protocols” Term.....	20
3.	“Parameter Set” Term.....	20
H.	<i>O2 Micro</i> Terms.....	21
V.	CONCLUSION.....	22

## TABLE OF AUTHORITIES

### Cases

<i>Bytemark, Inc. v. Masabi, Ltd.</i> , No. 2:16-cv-00543-JRG-RSP (E.D. Tex. June 20, 2017) .....	1
<i>Chef America, Inc. v. Lamb-Weston, Inc.</i> , 358 F.3d 1371 (Fed. Cir. 2004).....	15
<i>Core Wireless Licensing S.A.R.L. v LG Electronics, Inc.</i> , No. 2:14-cv-0911-JRG-RSP (E.D.Tex. November 7, 2015) .....	5, 13
<i>Eaton Corp. v. Rockwell Int'l. Corp.</i> , 323 F.3d 1332 (Fed. Cir. 2003).....	5
<i>IPXL Holdings, L.L.C. v. Amazon.com, Inc.</i> , 430 F.ed 1377 (Fed. Cir. 2005).....	10, 11, 13
<i>K-2 Corp. v. Salomon S.A.</i> , 191 F.3d 1356 (Fed. Cir. 1999).....	15
<i>Medtronic, Inc. v Advanced Cardiovascular Sys., Inc.</i> , 248 F.3d 1303 (Fed. Cir. 2001).....	2, 15
<i>Microprocessor Enhancement Corp. v. Texas Instruments, Inc.</i> , 520 F.3d 1367 (Fed. Cir. 2008).....	10
<i>NetMoneyIN, Inc. v. VeriSign, Inc.</i> , 545 F.3d 1359 (Fed. Cir. 2008).....	16
<i>O2 Micro Int'l. Ltd. v. Beyond Innovation Technology Co.</i> , 521 F.3d 1351 (Fed. Cir. 2008).....	21
<i>Renishaw PLC v. Marposs Societa'per Azioni</i> , 158 F.3d 1243 (Fed. Cir. 1998).....	1, 2, 20, 21
<i>Thorner v. Sony Computer Entertainment America, LLC</i> , 669 F.3d 1362 (Fed. Cir. 2012).....	1
<i>Typhoon Touch Technologies, Inc. v. Dell, Inc.</i> , 659 F.3d 1376 (Fed. Cir. 2011).....	10, 18
<i>Typhoon Touch Technologies, Inc. v. Dell, Inc.</i> , No. 6:07-cv-546 (E.D. Tex. July 23, 2009) .....	10, 16, 18

<i>Williamson v. Citrix Online LLC</i> , 792 F.3d 1339 (Fed. Cir. 2015).....	2, 14, 15
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**Statutes**

35 U.S.C. § 112 .....	2, 16, 17
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## **I. INTRODUCTION**

Plaintiff's Opening Claim Construction Brief has scant discussion of the actual disclosure in the '467 Patent and no mention of its prosecution history. That absence is consistent with plaintiff's strategy of seeking no construction for any of the terms in the body of the claims, but offering a construction on a preamble of independent claim 10. For the reasons discussed below, the Court should reject Salazar's approach and adopt HTC's constructions, which are based on the intrinsic evidence.

## **II. RELEVANT CLAIM CONSTRUCTION LAW**

Salazar's discussion of claim construction legal standards appears to come verbatim from the Court's June 6, 2017 Claim Construction Memorandum and Order in *Bytemark, Inc. v. Masabi, Ltd.*, No. 2:16-cv- 00543-JRG-RSP (E.D. Tex. June 20, 2017) [Dkt. 81], except Salazar truncated the Court's discussion of extrinsic evidence and a patentee being his own lexicographer. However, on September 18, 2017, the parties stipulated that Salazar's only extrinsic evidence, namely the declaration of Roy A. Griffin III, was being withdrawn along with all reference to it in Salazar's briefing, rendering moot the need for any further discussion of extrinsic evidence law. For convenience, HTC attaches the filed Stipulation [Dkt. 88] as Exhibit A to the Selinger Declaration, filed concurrently herewith.

To act as his own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* (quoting *Thorner v. Sony Computer Entertainment America, LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also Renishaw PLC v. Marposs Societa'per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998). The patentee's lexicography must appear "with reasonable clarity, deliberateness, and precision."

*Renishaw*, 158 F.3d at 1249. As the Court noted in *Bytemark*, it generally is improper to read particular embodiments and examples into the claims.

Finally, several disputed claim terms require construction under § 112(f), although they do not use the term “means.” When a claim limitation lacks the word “means,” § 112(f) still applies if the claim term fails to “recite[] sufficiently definite structure” or else recites “function without reciting sufficient structure for performing that function.” *Williamson v. Citrix Online LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc). HTC shows below that limitations recite extensive functionality without reciting sufficient structure for performing the recited functions.

Construing a means-plus-function limitation involves several steps. The first step is determining the function of the limitation. The second step is determining the corresponding structure disclosed in the specification, *i.e.*, a disclosure in the specification that clearly links or associates that structure to the function recited in the claim. *See, e.g., Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). A term being construed under § 112(f) but lacking corresponding structure is indefinite under § 112 and invalid. In the context of a claim governed by 35 U.S.C. § 112(f) (or 112, ¶ 6), the claim is invalid as indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed functions. *Williamson*, 792 F.3d at 1351-52.

### **III. THE ‘467 PATENT AND ITS PROSECUTION HISTORY**

#### **A. The ‘467 Patent**

The specification explains that to “have a handset that is capable of communicating with substantially all major brands of various devices,” “requires a substantially large memory to store all the command code sets with various sets of signals.” *See* ‘467 Patent, 7:55, *et seq.* (attached as Exhibit B to the Selinger Declaration). Thus, “[h]andset 10 in accordance with the present

invention employs an encoding technique to store the desired signals in a memory space in the order of 10Kbytes of data” rather than in “a memory space on the order of 135 Mbytes of data.” *Id.*, 8:10-21.

The specification emphasizes the importance of software to the claimed invention. Software “within microprocessor 30 creates a generalized command and control protocol which makes it possible to interact ... with any number of external devices .... The software also provides all of the internal controls and necessary protocols for specified radio and infra-red communication links.” ‘467 Patent, 7:14-20. This software/hardware interaction was necessary because “[t]ypically, each manufacturer of one of these devices such as TV sets, VCR sets, CD players and Cable boxes, employs a specific communication protocol that includes a command code set for performing various functions to remotely control the device. Each command code set comprises a set of signals, wherein each signal is utilized to perform an available function.” *Id.*, 7:40-46.

#### **B. The Prosecution History is Highly Relevant**

On April 27, 1997, the Examiner rejected claims 1-27, which were all of the then-pending claims. *See* Exhibit C to the Selinger Declaration, at 2 (the April 27, 1997 Office Action from the prosecution history of the ‘467 Patent). On October 31, 1997, applicants responded, making both extensive claim amendments and detailed arguments characterizing the invention to distinguish the amended claims from the cited prior art. *See* Exhibit D to the Selinger Declaration (the October 31, 1997 Amendment from the prosecution history of the ‘467 Patent).

Applicants asserted that “[c]ompared to prior art devices, the system is capable to send and receive many more types of signals to and from a plurality of devices, regardless of the type of protocol that is required to communicate with a remote device,” citing an “object of the

present invention” describing a microprocessor and software “to provide a flexible way to add accessory appliances” without the need to buy additional devices. Ex. D at 9<sup>1</sup> (citing to what became Ex. B, 2:56-61). Applicants emphasized that the prior art problem was that “a substantially large memory space is required to store all these various signals corresponding to different manufacturers and different external devices.” Ex. D at 10. They proposed to overcome that problem by providing a memory device “configured to store a finite set of parameters that may be used to recreate and generate signals corresponding to a desired command code set.” *Id.*

In pertinent part, applicants amended independent claims 1 and 10 by adding (1) the entire “memory device” limitation and (2) functionality that the “microprocessor for generating a plurality of control signals” also creates a plurality of reprogrammable communication protocols with each communication protocol including a command code set defining the signals employed to communicate with each one of the external devices. *Id.*, at 1-2, 3-4. Applicants added new claim 34, with comparable limitations. *Id.* at 7.

Applicants argued that the prior art references did not disclose a communication system including “a microprocessor that creates a plurality of reprogrammable communication protocols.” *Id.* at 12 (emphasis in original). They also argued that the prior art failed to suggest “a memory device that is configured to store a plurality of parameter sets that may be retrieved by the microprocessor so as to recreate a desired command code set.” *Id.* Based on those claim amendments and arguments, the Examiner allowed all pending claims.

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<sup>1</sup> HTC refers to the page numbers used by applicants in the Amendment.



#### IV. CONSTRUCTION OF THE TERMS

##### A. The Claim Preamble Agreements

On September 18, 2017, the parties also reached agreement and stipulated that the preambles of the three independent claims are substantive limitations. *See* Exhibit E to the Selinger Declaration [Dkt. 89]. The parties also now agree that the phrase “communications, command, control and sensing system” does not need to be construed. *Id.*

The preambles of claims 1 and 34 are identical: “[a] communications, command, control and sensing system for communicating with a plurality of external devices, comprising.” The body of each of claims 1 and 34 refers back to the preamble by using claim phrases such as “said system” and “said external devices.” *See* ‘467 Patent, 25:60- 26:18 (claim 1), 30: 8-34 (claim 34). The preamble of claim 10 is [a] handset and a base station employed in a communications, command, control and sensing system for communicating with a plurality of external devices, said handset and base station each comprising.” The body of claim 10 also refers back to the preamble by using claim phrases such as “said system” and “said external devices.” *See* ‘467 Patent, 27:9-52.

The intrinsic evidence supports the agreements reflected in the Stipulation. Because “limitations in the body of the claim rely upon and derive antecedent basis from the preamble ... the preamble acts as a necessary component of the claimed invention.” *See, e.g., Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, Case No. 2:14-cv-0911-JRG-RSP (E.D. Tex. November 7, 2015), slip op at 10, *quoting Eaton Corp. v. Rockwell Int’l. Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003). Accordingly, the Court should adopt the agreements reflected in the Stipulation and construe the preambles as substantive limitations. [Dkt. No. 89]

## B. “Base Station”

Despite the aforementioned agreements regarding the preamble, the parties still dispute the meaning of “base station” in the broader “handset and base station” term, as recited in the preamble of independent claim 10, and in dependent claim 23. Salazar’s proposed construction for “handset and base station” is set out on page 6 of his opening brief:

[T]he handset and the base station have similar components and function in substantially the same manner. The base station may have additional features, for example: it couples a frequency modulated signal to alternating current (AC) power line; it may be powered by an alternative alternating current (AC) signal and battery power sources; it may provide battery charging for the handset and it may be coupled to public or private telephone lines.

Salazar copied that text verbatim from two sentences cherry-picked from the lengthy “Summary of the Invention.” *See* ‘467 Patent, 3:2-8.

In doing so, Salazar ignores important language in the specification that clarifies the meaning of “additional features.”

Fig. 5 is a block diagram of the electronic components comprising base station 25 which performs substantially the same functions as handset 10. However, base station 25 **may employ at least three additional functions**, such as: coupling the ... system to a telephone line [via] a telephone line interface 310; coupling FM signals to and from the AC power line with an AC line FM coupler 161; and providing AC power via an AC power supply 116 for operating base station and charging the handset battery with charger 115.

*Id.*, 22:36-46 (emphasis added). The reason the base station may employ the “at least three additional functions, such as coupling ...” and “providing AC power” is because the base station **comes with structure** that allows users to employ one or more of those additional functions in the “communications ... system.” *See also* ‘467 Patent, Fig. 4 (showing structure that allows users to employ additional functions).

Dependent claim 12 provides further support because it requires said base station [to be] “coupled to at least one telephone line via a telephone line interface.” That is, dependent claim

12 adds to the system functionality of communicating with external devices claimed in independent claim 10 also being “coupled to” a telephone line. Dependent claim 12’s coupling is only possible because the base station already has a telephone line interface.

Salazar’s flawed construction glosses over what applicants disclosed and claimed, namely that a base station is a different device than a handset. Claim 10 recites that “a handset and a base station” are together “employed in a communications, command, control and sensing system.” The specification teaches that the invention of the “communication ... system” is “in the form of remote handset or base station, or both.” ‘467 Patent, 2:66-3:2. Notably absent is any suggestion that the disclosed and claimed system may consist of two base stations or two handsets. On the contrary, Figs. 1a and 1b are block diagrams illustrating a system of the type recited in claim 10. ‘467 Patent, 6:1-5. They show how a “base station” is different from a “handset,” distinctions also depicted in Figures 2-5. HTC’s construction eliminates any doubt that a base station is a different device than a handset, and that a base station has structure that enables use of specific additional functionality.

HTC thus asks that the Court construe “base station” as:

**A device separate from the handset that is structured to transmit signals to and receive signals from the handset, has a telephone line interface that can be used to couple the system to a telephone line, has an AC line FM coupler that can be used to couple FM signals to and from the AC power line and an AC power supply that can be used to provide AC power for operating the base station and charging the handset battery.**

Salazar’s proposed construction should be rejected.

### **C. The “Microprocessor” Limitations**

Each of the independent claims has a lengthy “microprocessor” limitation. Claims 1 and 34 share the identical limitation:

a microprocessor for generating a plurality of control signals used to operate said system, said microprocessor creating a plurality of *reprogrammable*

communication protocols for transmission to said external devices, each protocol containing a plurality of control signals used to interface with an external device, wherein each communication protocol includes a command code set that defines the signals that are employed to communicate with each one of said external devices;

Claim 10 has a virtually identical limitation, without only the word “reprogrammable”:

a microprocessor for generating a plurality of control signals used to operate said system, said microprocessor creating a plurality of communication protocols, for transmission to said external devices wherein each communication protocol includes a command code set that defines the signals that are employed to communicate with each one of said external devices;

Salazar treats all three limitations the same way and HTC agrees with that approach.

Salazar contends “no construction is necessary and one with ordinary skill in the art would understand the ordinary and customary meaning....” Opening Br. at 10. At the very least, based on the intrinsic record, the Court should reject Salazar’s approach and construe the microprocessor limitations such that the microprocessor must be actually programmed to perform all of the recited functional language. Furthermore, as described below, the “microprocessor” limitations violate the rule in *IPXL Holdings* by failing to provide adequate notice when infringement may occur, and thus are invalid as indefinite.

#### 1. The Microprocessor Limitations Must Include the Recited Functionality

The Examiner rejected all pending claims over the prior art *Krisbergh* patent. *See, e.g.*, Exhibit C, at “page 3-page 6” (rejection). The *Krisbergh* patent, Exhibit F to the Selinger Declaration, disclosed a combination telephone handset and remote control device with a microprocessor and memory devices. Applicants extensively amended the “microprocessor” limitations to overcome the prior art rejection based on the *Krisbergh* patent. *See* Exhibit D, at 1-2, 3-4 (claim amendments). In pertinent part, they added the “wherein” clauses in independent

claims 1 and 10, changed “communication device” to “system” in claim 10, and included the amended microprocessor limitation from claim 1 in new claim 34. *Id.*

Applicants then argued patentability of the amended claims, including specific discussion of the microprocessor limitation. They began by restating that one of the “objects of the present invention,” was “to use a microprocessor and ... software.” *Id.* at 9. They explained that the “communication system as claimed herein” used “the communication protocols utilized by various manufacturers or various models of the same brand of external devices,” but as noted in the specification, a “substantially large memory space is required to store all of these various signals corresponding to different manufacturers and different external devices.” *Id.* at 10. Thus, instead of storing all of the actual signals used to communicate with external devices, applicants created and stored “a set of parameters” in memory from which “the actual signals” of all of the different manufacturers are “recreated or reconstructed.” *Id.* at 11.

Applicants then distinguished the prior art *Krisbergh* reference on which the Examiner had relied because it:

does not teach or disclose a communication system that includes a microprocessor that creates a plurality of reprogrammable communication protocols. Furthermore, *Krisbergh* does not teach or suggest a memory device that is configured to store a plurality of parameter sets that may be retrieved by the microprocessor so as to recreate a desired command code set.

*Id.* at 12 (emphasis in original). What *Krisbergh*’s microprocessor ostensibly lacked was the specific functionality recited in the revised claims. According to applicants, the *Krisbergh* microprocessor was not programmed or configured to perform the specific functions on which applicants for the ‘467 Patent predicated patentability. Exhibit D at 12.

Consequently, applicants defined a requirement of the microprocessor, not merely that the microprocessor has the ability to be programmed to perform the recited functions. *Typhoon*

*Touch Technologies, Inc. v. Dell, Inc.*, 659 F.3d 1376, 1380-81 (Fed. Cir. 2011) (affirming construction that a “memory for storing” clause requires that the memory is actually programmed or configured to store the recited data collection application). *See also Typhoon Touch Technologies, Inc. v. Dell, Inc.*, No. 6:07-cv-546 (E.D. Tex. July 23, 2009) Slip Op. at 5-6 (“Here, the structure of the ‘memory’ and the ‘run-time executor’ are defined according to their functions: e.g., storing data collection applications or executing data collection applications. Thus, the claim uses functional language that describes the structure of a ‘memory’ and ‘run-time executor’ beyond being merely ‘memory’ and a ‘run-time executor.’” (citations omitted)); *Microprocessor Enhancement Corp. v. Texas Instruments, Inc.*, 520 F.3d 1367, 1374-75 (Fed. Cir. 2008) (“Direct infringement of claim 1 is clearly limited to *practicing* the claimed method in a pipelined processor possessing the requisite structure.” (emphasis in original)).

Based on the claim amendments and arguments applicants made to obtain allowance of the ‘467 Patent, the Court should construe the “microprocessor” limitations as proposed by HTC:

**A microprocessor configured to create a plurality of control signals used to operate the communications, command control and sensing system and to create all of the command code sets for [reprogrammable] communication protocols of each of the plurality of external devices with which the system is intended to communicate.**

As noted above, Salazar’s position is “no construction is necessary.”

2. The Microprocessor Limitations Fail to Provide the Requisite Notice Under IPXL Holdings

Salazar’s functional claiming approach also renders each “microprocessor” limitation invalid as indefinite they do not give the public fair notice as to when infringement occurs or who might be liable for infringement. *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005). Salazar’s only responses are his attorney’s conclusory assertion that a POSITA would understand the three microprocessor terms, Opening Brief at 7, and that

HTC provided “no analysis or explanation” beyond asserting *IPXL* as a basis for indefiniteness. *Id.*, n.2. This brief is the appropriate forum for, and where HTC provides, its detailed analysis and explanation.

*IPXL* involved a dependent system claim already including an “input means” that added the further limitation “and the user uses the input means ....” *Id.* The Federal Circuit agreed it was unclear whether “infringement of [the claim] occurs when one creates a system that allows the user to change the predicted transaction information ... or whether infringement occurs when the user actually uses the input means....” *Id.* In addition, the appellate court was concerned because “a manufacturer or seller of the claimed apparatus would not know from the claim whether it might also be liable for contributory infringement because a buyer or user of the apparatus later performs the claimed method of using the apparatus.” *Id.* (Citation omitted.) Here, applicants also created a similar level of confusion by mixing “creating” and “recreating.”

Specifically, the ‘467 Patent clearly discloses that “creating” means making something for the first time while “recreate” means duplicating something previously created. *Compare* ‘467 Patent, 25:62 (“said microprocessor creating”); 27:12-13 (“said microprocessor creating”); 29:17 (“so as to create other command code sets”) *with* 8:24-28 (memory is “configured so as to store a finite set of parameters that may be used to recreate and generate signals corresponding to a desired command code set”). Applicants also emphasized this distinction during prosecution: “[I]nstead of storing actual signals that are employed to communicate with external devices... a set of parameters are stored in the memory, and the actual signals are **recreated or reconstructed** based on the information provided by these parameters as stored.” Exhibit D, at 11 (emphasis added).

Applicants' commixing of these two different terms in each of the independent claims creates inappropriate and unfair confusion. The limitation begins with "a microprocessor for generating a plurality of control signals ... said microprocessor **creating a plurality** of communication protocols for transmission to said external devices wherein each communication protocol includes a command code set ...." (Emphasis added). The initial "creating ... of communications protocols" is then impermissibly confused with "a memory device ... configured to store a plurality of parameter sets ... **so as to recreate** a desired command code set ...." (Emphasis added.) That is, the microprocessor "creates" communication protocols but the memory device is configured to store parameter sets "so as to recreate" the protocol command code sets.

Further confusion exists because the patent and the prosecution history make it clear that the timing of, and the act of, "said microprocessor **creating** a plurality of" protocols is different than the timing of, and the act of, "a memory device ... configured to store a plurality of parameter sets ... **so as to recreate** a desired command code set ...." The specification explains in clear and unambiguous language that the initial "creating" act occurs at a prior time and outside of the claimed system:

"[M]icroprocessor 30 may generate a sequence of signals for a desired command code set based on the information contained in a corresponding parent or child array. In operation microprocessor 30 is configured to generate signals for a variety of desired command code set.

In order to construct these parent and child arrays, **first all signals generated by various remoted controllers that control most of the commercially available devices may be analyzed....** In accordance with one method for constructing parent and child arrays, a signal analyzer is coupled to the output of different commercially available remoted controllers to determine the command code set corresponding to each controller ....

'467 Patent, 16:40-55 (emphasis added).



The claimed “said microprocessor creating a plurality of reprogrammable communication protocols,” as taught in the ‘467 Patent to a person of ordinary skill in the art in 1995, differs both as to when in time “creating” occurs and who causes “creating” -- as contrasted with when “actual signals” are “recreated or reconstructed” from the parameter sets stored in memory. Exhibit C at 11. The public is not given reasonable notice about when infringement occurs or who might be at risk. *IPXL, supra, Core Wireless, supra, Slip Op.* at 12.

For these reasons, the Court should hold the independent claims, and all dependent claims, indefinite and invalid. *IPXL, supra.*

#### **D. The “Memory Device” Limitations of Claims 1, 10 and 34**

Each of the independent claims has a “memory device” limitation that was added during prosecution. *See* Section III, B, *supra*. The limitations in claims 1 and 10 are identical while there are some minor differences between that limitation and the one in claim 34. Nevertheless, Salazar treats the limitations jointly and HTC agrees they can be construed as a group. The claim 1/10 limitation is:

a memory device coupled to said microprocessor configured to store a plurality of parameter sets retrieved by said microprocessor so as to recreate a desired command code set, such that the memory space required to store said parameters is smaller than the memory space required to store said command code sets. ‘467 Patent, 26:1-7, 27:18-23.

The claim 34 limitation is:

a memory device coupled to said microprocessor configured to store a plurality of parameter sets retrieved by said microprocessor so as to recreate based on said parameter sets a desired set of pulse signals corresponding to logical “1’s” and “0’s” as specified by a command code set. ‘467 Patent, 30:17-23.

##### **1. The “Memory Device” Limitations are Governed by § 112(f)**

Salazar relies on the rebuttable presumption that § 112(f) does not apply because the limitations do not use the term “means,” Opening Br. at 8, 9, and a boilerplate statement by his

attorneys that a POSITA “would be informed of and understand the meaning, scope and necessary structure of the claim terms.” *Id.* at 8. The intrinsic record is to the contrary, as shown below.

The “memory device” limitations should be construed under § 112(f) even though the limitations lack the word “means,” because each term recites “function without reciting sufficient structure for performing that function.” *Williamson*, 792 F.3d at 1348. In particular, the “memory device,” while “coupled to” a microprocessor, must be “configured to store a plurality of parameter sets” in addition to being able to “recreate a desired command code set, such that the memory space required to store said parameters is smaller than the memory space required to store said command code sets” or “recreate based on said parameter sets a desired set of pulse signals corresponding to logical ‘1’s’ and ‘0’s’ as specified by a command code set.”

While a memory device can be “configured to store,” a memory device cannot itself perform the functions of recreating either (1) a desired command code, such that the memory space required to store the parameters is smaller than the memory required to store command code sets; or (2) based on said parameter sets a desired set of pulse signals corresponding to logical “1’s” and “0’s” as specified by a command code set.

The ‘467 Patent confirms the claimed functions tied to the memory device cannot be performed by the memory device. “[M]icroprocessor 30 in accordance with the present invention, retrieves data from a memory device ... that is configured so as to store a finite set of parameters that may be used [by the microprocessor] to recreate and generate signals corresponding to a desired command code set.” ‘467 Patent, 8:22-29. Moreover, “[i]n one embodiment of microprocessor 30, in accordance with the present invention, each command code set is represented by parameters ....” *Id.*, 8:34-38. *See also* Ex. D at 11 (“This feature

allows the communication system to have an open architecture, so the microprocessor can be reprogrammed so that proper signals corresponding to a new device can be recreated by storing or varying the parameters related to the new device.”) The microprocessor, not the memory device, performs the claimed functions, yet the claim language clearly requires the memory device perform the “recreate” function.

Since the “memory device” limitations each recite “function without reciting sufficient structure for performing that function,” *Williamson*, 792 F.3d at 1348, the Court should construe them under § 112(f). *See also K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364-65 (Fed. Cir. 1999) (“Courts do not rewrite claims; instead we give effect to the terms chosen by the patentee”); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1373-74 (Fed. Cir. 2004) (same).

Turning to the applicable methodology, for claim 34, the function is “storing a plurality of parameter sets retrieved by said microprocessor so as to recreate based on said parameter sets a desired set of pulse signals corresponding to logical “1’s” and “0’s” as specified by a command code set,” and for claims 1 and 10, the function is “storing a plurality of parameter sets retrieved by said microprocessor so as to recreate a desired command code set, such that the memory space required to store said parameters is smaller than the memory space required to store said command code sets.” *See Medtronic*, 248 F.3d at 1311.

As detailed above, neither the specification nor the prosecution history provides “corresponding structure” linking the recited function of the “memory device” to any disclosure of structure in the specification allowing the memory device to perform the recited function. Nor does Salazar identify or propose any such corresponding structure in his opening brief. For these reasons, the Court should hold that the “memory device” limitations in each independent claim

are indefinite. *See, e.g., Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008). Consequently, the Court should hold each of the independent claims, and all of the asserted dependent claims are invalid. *See, e.g., Typhoon Touch Technologies, Inc. v. Dell, Inc.*, No. 6:07-cv-546 (E.D. Tex. July 23, 2009), Slip Op. at 12 (claims failing to disclose corresponding structure under § 112(f) are indefinite and invalid).

## 2. Construction Without Application of § 112(f)

If the Court, *arguendo*, declines to apply § 112(f) to the “memory device” limitation, then the Court should construe the limitations to give effect not merely to the “memory device,” but also to the additional functional language purporting to describe the structure of the memory device. *See, e.g., Typhoon Touch*, No. 6:07-cv-546, Slip Op. at 5-6 (“Here, the structure of the ‘memory’ and the ‘run-time executor’ are defined according to their functions: *e.g.*, storing data collection applications or executing data collection applications. Thus, the claim uses functional language that describes the structure of a ‘memory’ and ‘run-time executor’ beyond being merely ‘memory’ and a ‘run-time’ executor.”) (citations omitted); *Typhoon Touch*, 659 F.3d at 1380-81 (affirming construction that a “memory for storing” clause requires that the memory is actually programmed or configured to store the recited data collection application).

With respect to claims 1 and 10, the Court should construe the “memory device” limitation as:

**a memory device configured to store a plurality of parameter sets retrieved by said microprocessor so as to recreate a desired command code set, such that the memory space required to store said parameters is smaller than the memory space required to store said command code sets.**

With respect to claim 34, the Court should construe the “memory device” limitation as:

**a memory device coupled to said microprocessor configured to store a plurality of parameter sets retrieved by said microprocessor so as to recreate based on said parameter**

**sets a desired set of pulse signals corresponding to logical “1’s” and “0’s” as specified by a command code set.**

Salazar’s position is “no construction is necessary.” His position once again seeks to ignore the claim amendments and arguments that were critical to allowance of the claims.

#### **E. The “Selector” Limitations**

Dependent claim 2, independent claim 10, and dependent claims 3-5, 14, 17, 23, 26, 31 and 32 have the “selector” limitation:

a selector controlled by said microprocessor for enabling said radio frequency transceiver and said infra-red frequency transceiver, to transmit a desired command code set generated by said microprocessor via either radio frequency signals and infra-red signals as desired, and to receive a signal from any of said external devices via either radio frequency signals and infra-red signals;

To simplify the instant dispute, HTC here focuses only on its construction not governed by § 112(f). The intrinsic record shows that HTC is entitled to its proposed construction and that Salazar’s efforts to avoid any explanation about what the meaning would be to a POSITA should be rejected. Opening Brief at 11.

The “selector” limitations were extensively amended during prosecution, Exhibit D at 2-3, 5, and were argued as a basis for patentability. *Id.* at 11-13 (“a handset or base station of one embodiment of the communication system of the present invention, is capable of transmitting signals to or receiving signals from the same external device in either RF or IR mode. This feature **allows the user to select** a desired mode based on, for example, environmental factors or range of communication with the external device.” (emphasis added)). *Accord id.* at 14-15 (referring to claim 10, “[t]here is no selector in Krisbergh that allows communication with external devices in a dual frequency range **as selected by the user.**” (emphasis added)).

Consistent with HTC’s arguments above concerning functional language in the context of claim construction, the Court should construe the limitations to give effect not merely to a

“selector” but also to the additional functional language purporting to describe the structure of the selector and the arguments made in the prosecution history. *See, e.g., Typhoon Touch*, 659 F.3d at 1380-81; *Typhoon Touch*, No. 6:07-cv-546, Slip Op. at 5-6. In particular, the Court should construe the “selector” term as:

**a device that transmits a command code set generated by a microprocessor to an external device via either radio frequency or infra-red frequency signals as selected by a user, and receives signals from external devices via both radio frequency and infra-red.**

Salazar’s position is “no construction is necessary.” His position once again seeks to ignore the claim amendments and arguments that were critical to allowance of the claims.

#### **F. The “Data Detector” Limitation**

Independent claim 10, and asserted claims 14, 17, 23, 26, 31 and 32 recite:

a data detector coupled to said selector for receiving signals transmitted from each one of said external devices, said data detector providing control signals received from said external devices to said microprocessor.

Salazar once more contends no construction is required. Opening Brief at 10-11. Based on the intrinsic record, the Court should reject Salazar’s approach and construe the “data detector” limitation to reflect the functional language recited in that limitation.

Here also, the Court should construe the limitations to give effect not merely to a “data detector,” but also to the additional functional language purporting to describe the structure of the data detector. *See, e.g., Typhoon Touch*, 659 F.3d at 1380-81; *Typhoon Touch*, No. 6:07-cv-546, Slip Op. at 5-6. In particular, the Court should construe the “data detector” term as:

**a device configured to receive signals from each one of the external devices through the selector and to transmit control signals from the external devices to a microprocessor.**

#### **G. Communications Terms**

The independent claims use the terms “communication protocols,” “parameter sets,” and “command code set that defines the signals that are employed to communicate with each one of

said external devices.” Plaintiff again objects to HTC’s proposed constructions in conclusory fashion, but offers no construction except lawyer argument that these terms should have their ordinary and customary meaning, albeit with no indication of the actual meaning. Opening Br. at 10-11.

The three terms are not the type of verbiage that a typical juror would understand. HTC offers construction based on the intrinsic evidence, where Salazar was his own lexicographer. Moreover, since Salazar has not offered alternative constructions, it is unclear whether an *O2 Micro* dispute exists even under the Salazar approach.

1. “Command Code Set” Term

HTC asks the Court to construe “command code set that defines the signals that are employed to communicate with each one of said external devices” as: **“a set of signals that constitute the universe of signals necessary to perform all of the specific functions in each remotely controlled device.”**

The intrinsic evidence supports this construction. *See, e.g.*, ‘467 Patent, 7:40-52:

Typically, each manufacturer of one of these devices ... employs a specific communication protocol that includes a command code set for performing various functions to remotely control the device. Each command code set comprises a set of signals, wherein each signal is utilized to perform an available function. For example, a TV set made by manufacturer A may require a command code set that includes various signals to remotely control various available functions such as channel up, channel down, volume up, volume down, mute, and power “on” and “off”. This command code set may have a different set of signals than another command code set employed for a TV set made by manufacturer B”); *id.*, 8:31-34 (“As mentioned previously, each command code set includes a set of signals that may be employed to transmit a specific command to an infra-red receiver located in an electronic device that is being controlled.

“Command code set” is not a term that will be familiar to a jury. Moreover, the applicants defined the meaning of this term in the context of their 1995 application. The Court

should reject Salazar’s approach and construe the term to avoid confusion and provide guidance for the jury. *See also Renishaw*, 158 F.3d at 1249 (lexicographer).

## 2. “Communications Protocols” Term

HTC asks the Court to construe “communications protocols” as: **“sets of rules that allow for two or more devices to communicate wirelessly with one another using a command code set to produce an action in a remotely controlled external device.”**

The intrinsic evidence supports this construction. *See, e.g.*, ‘467 Patent, 7:34 *et seq.* (“The handset is further configured to utilize several communication protocols employed by various manufacturers or various models of the same brand. Typically, each manufacturer ... employs a specific communication protocol that includes a command code set for performing various functions to remotely control the device.”). This also is not a term that will be familiar to a jury. Moreover, the applicants defined the meaning of “communications protocols” in the context of their 1995 application. The Court should reject Salazar’s approach and construe the term to avoid confusion and provide guidance for the jury. *See also Renishaw*, 158 F.3d at 1249 (lexicographer).

## 3. “Parameter Sets” Term

HTC asks the Court to construe “parameter sets” as: **“a set of predefined encoded data stored in the memory device that the microprocessor retrieves and uses to recreate a command code set.”**

Intrinsic evidence supports HTC’s construction. *See, e.g.*, ‘467 Patent, 26:1-7, 27:18-23 (“a memory device ... configured to store a plurality of parameter sets retrieved by said microprocessor so as to recreate a desired command code set, such that the memory space required to store said parameters is smaller than the memory space required to store said



command code sets.”). This is not a term that will be familiar to a jury. Here also, the applicants defined the meaning of “parameter sets” in the context of their 1995 application. The Court should reject Salazar’s approach and construe the term to avoid confusion and provide guidance for the jury. *See also Renishaw*, 158 F.3d at 1249 (lexicographer).

#### **H. O2 Micro Terms**

Finally, there are three terms that seemingly have ordinary meanings, except that Salazar has taken positions in his infringement contentions inconsistent with HTC’s understanding of the ordinary meaning of the terms, as defined by the intrinsic evidence in this case. *See generally, O2 Micro Int’l. Ltd. v. Beyond Innovation Technology Co.*, 521 F.3d 1351, 1361-63 (Fed. Cir. 2008). First, HTC asks the Court to construe “backup battery power source” in claim 14 as: **“a battery that serves as a substitute or support for a primary power source in a base station portion of the ‘communications ... system.’”**

Support for HTC’s construction comes from claim 14 “wherein said base station further comprises a backup battery power source,” ‘467 Patent, 28:1-4. The specification also supports this construction. *Id.*, 35:33-38 (“Base station power is provided both with a backup battery pack 115 and by direct connection to an alternating current source 116. The alternating current source is further used to charge the handset battery. A battery charger 110 provides the means for charging the handset battery and the battery within the base station 25.”). Salazar, on the other hand, seeks to deem accused smartphones both a handset and a base station, despite claim language that makes clear “handset” and “base station” are two different devices, even though they may have some functionality in common. *See, e.g.*, ‘467 Patent, Figs. 1a, 1b and 2-5 and accompanying text.

Second, HTC asks the Court to construe “a plurality of home entertainment systems” in claim 26 as: **“two or more home entertainment systems that are part of the wireless communications command, control and sensing system in addition to the handset and base station.”**

In part, support for this construction comes from claim 26 (“The wireless communication, command, control and sensing system of claim 23, further comprising a plurality of home entertainment systems ...”). ‘467 Patent, 29:4-8. The “communications ... system” already includes both a handset and a base station. The “home entertainment systems” must be something more, and HTC asks for such a construction. The confusion arises here because Salazar seeks to deem the accused smartphones “home entertainment systems” at the same time Salazar variously designates them as a handset or base station.

Third, HTC asks the Court to construe “external device” as: **“a device separate from the handset and base station that is remotely controlled by the handset or base station via a command code set.”**

Support for this construction comes from the common and ordinary meaning of the term “external device,” as well as from the ‘467 Patent. *See, e.g.*, 4:61-5:9 (“External appliance and/or apparatus functions are controlled in response to a radio or infra-red command and control signal generated and transmitted by the wireless communications, command, control and sensing system.”). Here also, HTC seeks this clarification to avoid confusion about accused smartphones being a base station or a handset and at the same time being an external device.

## **V. CONCLUSION**

For these reasons, HTC respectfully requests that the Court adopt its proposed constructions and reject Salazar’s proposed constructions.

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I certify that on September 20, 2017, that the foregoing document was electronically filed with the clerk of the court for the U.S. District Court, Eastern District of Texas, using the electronic case filing (“ECF”) system of the court. The attorneys of record who have consented in writing to accept notice as service of this document by electronic means are being served by a “Notice of Electronic Filing,” sent by the ECF system.

/s/Jerry R. Selinger